

SAF-RC-001

Industrial Hygiene Sampling

FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0164-01 SAF-RC-001

Rad only ☒ Chem only Rad & Chem

☒ Complete Partial

300 Area 314 Bldg

RECEIVED
MAR 21 2006

EDMC



Cover Page

Page 1 of 7



Report Identification Number: 06I-0164-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R31400 J452
Payroll#: 8C292

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
12 Jan 2006	J10X21	06I01342	NMAM 7300M	G060K00F	G WIPE
12 Jan 2006	J10X22	06I01343	NMAM 7300M	G060K00F	G WIPE
12 Jan 2006	J10X23	06I01344	NMAM 7300M	G060K00F	G WIPE
12 Jan 2006	J10X24	06I01345	NMAM 7300M	G060K00F	G WIPE

I certify that this electronic image and all hardcopies produced from this image accurately represent the data and are in compliance with the contract specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Name: Lisa M. Reid
Title: Chemist
Date: January 19, 2006

Report Identification Number: 06I-0164-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R31400 J452
Payroll#: 8C292

General Set Information: There are 4 samples in set 06I-0164-01, 3 samples in set 06I-0180-02 and 3 samples in set 06I-0181-02. The samples were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.07 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 2. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

Laboratory Control Sample and Duplicate Analysis: Two Laboratory Control Samples (LCSs) and two Laboratory Control Sample Duplicates (LCSDs) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

Replicate Analysis: One sample in this batch was replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:

Final result for aqueous samples ($\mu\text{g}/\text{sample}$) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ($\mu\text{g}/\text{L}$)

B = Concentration factor from sample preparation

= Final Volume of Digestate (L)

Sample

C = Dilution performed at time of analysis

Example Calculation: $(1 \mu\text{g}/\text{L}) \times (0.025 \text{ L}/\text{sample}) \times (1) = 0.025 \mu\text{g}/\text{sample}$

Miscellaneous Comments: None

Report Identification Number: 06I-0164-01
 Subcontract Number: 0000X-BO-G0058-B-Mod#4
 Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
 Laboratory Identification Number: DCHM
 SAF#: RC-001 / R31400 J452
 Payroll#: 8C292

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J10X21	06I01342	18 Jan 2006	<0.01	U	<0.07	U	<2.	U
J10X22	06I01343	18 Jan 2006	<0.01	U	<0.07	U	<2.	U
J10X23	06I01344	18 Jan 2006	<0.01	U	<0.07	U	<2.	U
J10X24	06I01345	18 Jan 2006	<0.01	U	<0.07	U	<2.	U
Limit of Detection (LOD)			0.01		0.07		2.	
Required Detection Limit (RDL)								

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.



QC Summary Page

Page 5 of 7

Report Identification Number: 06I-0164-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF: RC-001 / R31400 J452
Payroll#: 8C292

Batch ID: G060K00F

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-240146-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-240146-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-240146-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-240146-1	LCS	Beryllium	µg/sample	10.8	NA	10.0	108.	NA
QC-240146-1	LCS	Cadmium	µg/sample	32.5	NA	30.0	108.	NA
QC-240146-1	LCS	Lead	µg/sample	103.	NA	100.	103.	NA
QD-240146-1	LCSD	Beryllium	µg/sample	10.8	10.8	10.0	108.	0.207
QD-240146-1	LCSD	Cadmium	µg/sample	32.4	32.5	30.0	108.	0.185
QD-240146-1	LCSD	Lead	µg/sample	102.	103.	100.	102.	0.541

MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

$LCS, LCSD \text{ Percent Rec.} = (\text{Result} / \text{Target}) * 100.0$

$MS, MSD \text{ Percent Rec.} = ((\text{Result} - \text{Parent}) / \text{Target}) * 100.0$

$LCS, LCSD \text{ Relative Percent Diff.} = ((|LCS - LCSD|) / ((LCS + LCSD)/2.0)) * 100.$

$MS, MSD \text{ Relative Percent Diff.} = ((|MS - MSD|) / ((MS + MSD)/2.0)) * 100.$

$LD \text{ Relative Percent Diff.} = ((|Parent - LD|) / ((Parent + LD)/2.0)) * 100$

NOT - 01/04/08



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST																			
Collector: CLIFFORD GATES		Company Contact Dense A. Pitts and Henry W. Ruby		Telephone No. 531-1229		Project Coordinator Joan H. Kessner		Data Turnaround 3 day											
Payroll #: 8C292		Sampling Location 300 AREA		SPECIAL INSTRUCTIONS All relevant COAs must be provided: R31400 J452		SAF No. RC-001													
Type of Sample: Be, Cd, Pb		Wipe Sample Media: Ghost <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Other		ANALYSIS METHOD (SPECIFIC): NIOSH METHOD 7300		Method of Shipment Fed Ex													
Shipped To: DATA CHEM		Bill of Lading/Air Bill No. 8541 9337 5329																	
POSSIBLE SAMPLE HAZARD/REMARKS Be, Cd, Pb		MATRIX A - AIR WI - WIPE X - OTHER		Preservation (i.e., cooling required, etc.)		No		No		No		No		No		No		NA	
Special Handling and/or Storage NA																			
SAMPLE ANALYSIS					Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	NA						
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area / 100 cm	Comments															
J10X21	WI	1-12-06	X	NA				X		X	X								
J10X22	WI	1-12-06	X	NA				X		X	X								
J10X23	WI	1-12-06	NA	BLANK				X		X	X								
J10X24	WI	1-12-06	NA	BLANK				X		X	X								
CB 1-10-06																			

WCH-SH-202 (08/29/2005)

Page 1 of 2

DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

Enter on line below the first Sample Number from Page One:

J10X21

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
SIGN / PRINT NAMES / USE MILITARY TIME			
Received By/Sign: <u>Clifford Bates</u>	DATE / TIME: <u>1-12-06</u>	Received By/Sign:	DATE / TIME: <u>1-12-06</u>
<u>CLIFFORD BATES</u>	<u>1600</u>	<u>LOCKED DRAWER RM 16 3746 Bldg</u>	<u>1600</u>
Received By/Sign: <u>DMD/1945 / SMD/1945</u>	DATE / TIME:	Received By/Sign:	DATE / TIME:
<u>3746 room 16 locked cabinet</u>	<u>1-16-06 / 1915</u>	<u>RZ Steffler RZ Steffler</u>	<u>1-16-06 / 1915</u>
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
<u>RZ Steffler RZ Steffler</u>	<u>1-16-06 1500</u>	<u>Fed Ex</u>	
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
<u>Fed Ex</u>		<u>Meridel Edwards</u>	<u>1/16/06</u>
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
<u>Meridel Edwards</u>	<u>1/16/06</u>		
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
LABORATORY SECTION	Received By: <u>Meridel Edwards</u>	Title:	DATE / TIME: <u>1/16/06</u>

REVIEWED BY: _____

PRINT/SIGN NAME

DATE: _____

Enter on line below the first Sample Number from Page One:

J10X21

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Stored: <i>C. Clifford Bates</i> CLIFFORD BATES	DATE / TIME: <i>1-12-06</i> 1600	Received By/Stored: <i>LOCKED DRAWER RM 16 3746 Bldg</i> LOCKED DRAWER RM 16 3746 Bldg	DATE / TIME: <i>1-12-06</i> 1600
Relinquished By/Stored: <i>DMD: 3746 / 1-16-06</i> 3746 room 16 locked cabinet	DATE / TIME: <i>1-16-06 / 1415</i> 1-16-06 / 1415	Received By/Stored: <i>RZ Steffler RZ Steffler</i> RZ Steffler RZ Steffler	DATE / TIME: <i>1-16-06 / 1415</i> 1-16-06 / 1415
Relinquished By/Stored: <i>RZ Steffler RZ Steffler</i> RZ Steffler RZ Steffler	DATE / TIME: <i>1-16-06 1500</i> 1-16-06 1500	Received By/Stored: <i>Fed EX</i> Fed EX	DATE / TIME: <i></i>
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY:

DATE:

PRINT/SIGN NAME